Problems with the inner ear or the auditory nerve are called sensorineural hearing loss. Damage to the inner ear comes in different degrees: the more damage, the more hearing loss.

Some pitches may be affected more than others. This type of hearing loss usually leads to problems hearing soft sounds and problems understanding speech.

**Causes of Sensorineural Hearing Loss:**

- Heredity/Family history
- Trauma at birth
- Certain syndromes
- Certain drugs (prescription as well as illegal)
- Head injury
- Exposure to loud noise
- Tumors
- Aging process

**Diagnosis:**

A sensorineural hearing loss is diagnosed by performing a hearing evaluation. There are many types of tests to check for hearing loss. The child’s age, medical history and cooperation help the audiologist choose the best tests to use for each child. These tests are:

- Auditory Brainstem Response
- Visual Reinforcement Audiometry
- Conditioned Play Audiometry
- Conventional Audiometry

**Treatment:**

Sensorineural hearing loss is permanent. Usually, it cannot be treated medically. However, it can be treated with hearing aids.

Depending on the level of hearing loss and the pitches that are affected, the audiologist may suggest that the child try hearing aids. However, hearing aids are not like glasses; they will not give a child normal hearing. Hearing aids may help make some sounds easier to hear that they may not have heard well before. With hearing aids, speech may still sound distorted to the child, because hearing loss affects the inner ear in different ways. Making sound loud enough for a child to hear does not always make sound easier to understand.

**Effects of Sensorineural Hearing Loss:**

Depending on the severity of your child’s hearing loss, his/her speech and language may be affected. Speech sounds can be affected as well as language understanding. Every hearing impaired child should have a speech and language evaluation. If your child has a least a moderate hearing loss, speech-language therapy is usually needed.

**Please call (816) 234-3677 to make an appointment for a hearing evaluation or speech and language evaluation.**
DEGREES OF HEARING LOSS:

**Mild Hearing Loss**
With mild hearing loss, children cannot hear sounds softer than 26-40 decibels (dB). An example of sound they cannot hear is whispering, which is around 40 dB. If a child is not helped early in life, the hearing loss can cause inattention, language delays, and speech problems. Sounds that are somewhat loud to a normal hearing person, such as speech, will sound like a whisper to the child. With help, such as hearing aids and therapy, most children can understand the soft sounds of speech and the world around them.

**Moderate Hearing Loss**
Sounds softer than 41-55 dB cannot be heard by children with moderate hearing loss. Without help, most speech sounds will not be heard. Sounds that are loud to a normal hearing person will be a whisper to children with this amount of hearing loss. They will only understand speech if it is loud. Children may have errors in their speech. They may not pay attention and may have speech, language and learning problems. An adult may have a hard time understanding the child. With help, most children will develop vocabulary, language understanding and talking. Most children will learn to speak clearly.

**Moderately Severe Hearing Loss**
Children with this degree of hearing loss have problems hearing sounds softer than 56-70 dB. An example of a sound at this level is a dishwasher (60 dB). Without help, children with this amount of hearing loss can only hear and understand a loud voice very close to them. They usually do not develop speech and language on their own, and if they do, their speech will be poor. Hearing aids will help these children hear conversation. If the child gets speech and language therapy, they can understand and make most speech sounds.

**Severe Hearing Loss**
With severe hearing loss, children cannot hear sounds softer than 71-90 dB. Examples of sound they may not hear are a vacuum (70 dB), or a blender and a hairdryer (90 dB). Without help, the child will have problems understanding most speech sounds. The child will hear no speech sounds at normal conversation level. Sounds that are very loud to a normal hearing person will be very soft to the child. Speech will only be heard if it is shouted in the child's ear. A child with this degree of hearing loss will have speech that is not understandable. With the help of hearing aids or implants and therapy at an early age, children with this degree of hearing loss often can understand most sounds. They can learn to understand and speak, even though they will not hear speech the way children with normal hearing do. Most children will need help in school to make up for problems they have with hearing in noisy places or hearing far away sounds.

**Profound Hearing Loss**
Children with profound hearing loss cannot hear sounds softer than 91 dB. Examples of this are MP3 players with the volume turned up all the way (100 dB) and car horns (110 dB). These children must have special education to help them learn language and speech. Without this help, children cannot hear sounds. They use sight instead of hearing to communicate. People with normal hearing cannot understand their speech. However, technology and therapy can help children with profound hearing loss. With this help, many children will hear loud sounds and spoken conversation if there is no background noise and they are facing the speaker. Many children still need to use sight to help them understand spoken conversation. Most children need help in school to make up for the problems they have hearing and learning.